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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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09/773,418

02/01/2001

Richard J. Caldwell

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12/16/2004

PHILIPS INTELLECTUAL PROPERTY & STANDARDS

P.O. BOX 3001

BRIARCLIFF MANOR, NY 10510

EXAMINER

MILLS, DONALD L

ART UNIT

PAPER NUMBER

2662

DATE MAILED: 12/16/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/773,418

Applicant(s)

CALDWELL ET AL

Examiner

Donald L Mills

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 July 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1, 3, 5, 7, and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schroderus et al. (US 5,822,682), hereinafter referred to as Schroderus, in view of Kleider et al. (US 6,084,919), hereinafter referred to as Kleider.

Regarding claims 1, 3, and 7, Schroderus discloses communicating on a direct mode channel, which comprises *a controller and a plurality of stations* (Referring to Figures 1 and 2, controller 403 and DMRU1, DMRU2, DMRU3, and DMRU4,) *each station comprising transmission and reception circuitry* (Referring to Figure 2, Tx/Rx 401,) *in which peer-to-peer communication between stations takes place in time slots allocated by the controller* (Referring to Figure 2, direct mode communication, peer-to-peer, between subscriber stations using an appropriate time slot determined by controller 403. See column 8, lines 1-4.) *A receiving station having means for storing information relating to a transmission parameter of each of the others of the plurality of stations* (Referring to Figure 2, the radio unit 400 has a quality monitoring means 409 responsive to the transmission transmitted by other radio units DMRU1, DMRU3 and DMRU4 for monitoring 204 the quality of transmissions transmitted by the other radio units. See column 8, lines 21-25.) *And, the stored information is used to form a parameter history for*

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each station (Referring to Figure 2, step 207, stores the information including the field strength and transmit power. See column 5, lines 65-67 and column 6, lines 1-7.)

Schoderus does not disclose *means for adjusting the receiver circuitry prior to reception of a signal from a transmitting station using parameter history of the transmitting station.*

Kleider teaches a communication unit having spectral adaptability with a receive unit 16 which comprises a signal memory 37, for storing the received signal (parameter history), and a spectrum analyzer/mode estimator (SAME) 34 (See column 5, lines 21-25.) The SAME 34 is used to dynamically adjust receive parameters, such as channel detection thresholds in a multi-channel receiver embodiment before the next signal is received (prior to reception), based upon the profile of the received signal spectrum (See column 5, lines 39-42.)

It would have been obvious to one of ordinary skill in the art at the time the invention was made to implement the spectral adaptability of Kleider in the direct mode communication system of Schroderus. One of ordinary skill in the art would have been motivated to do so in order to reduce the effects of interference from another system on a data signal or existing signals utilized by multiple subscribers during direct communication.

Regarding claims 5 and 9, the primary reference further teaches *the transmission parameter as the signal strength of signals from the transmitting station* (Referring to Figures 1 and 2, DMRU2 monitors the transmit power of the other radio units on the basis of their transmission. See column 8, lines 21-28.)

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3. Claims 2, 4, 6, 8, and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schroderus et al. (US 5,822,682), hereinafter referred to as Schroderus, in view of Kleider et al. (US6,084,919), hereinafter referred to as Kleider, further in view of Fischer (US 5,371,734).

Regarding claims 2, 6, and 10 as explained above in the rejection statement of claim 1, Schroderus and Kleider disclose all of the claim limitations of claim 1 (parent claim). Schroderus does not disclose *storing a plurality of values for each transmission parameter relating to signals received at different times and operating on a plurality of these values to compensate for drift in the value of the transmission parameter.*

Fischer teaches that each remote communicator must repeatedly measure the time, from receipt of the information frame until the interval of interest, using the appropriate count of BTIs from the body of the information in order to resynchronize the internal clock to compensate for drift (See column 28, lines 3-15 and 28-32.)

It would have been obvious to one of ordinary skill in the art at the time the invention was made to implement the synchronization method of Fischer in the system of Schroderus. One of ordinary skill in the art would have been motivated to do so in order to compensate for drift in direct mode communication as taught by Fischer (See column 28, lines 11-15.)

Regarding claims 4 and 8 as explained above in the rejection statement of claims 3 and 7; Schroderus and Kleider disclose all of the claim limitations of claims 3 and 7 (parent claims). Schroderus does not disclose the *transmission parameter as the frequency offset of signals from the transmitting station.*

Fischer teaches that each remote communicator must repeatedly measure the time, from receipt of the information frame until the interval of interest (frequency offset), using the

appropriate count of BTIs from the body of the information in order to resynchronize the internal clock to compensate for drift (See column 28, lines 3-15 and 28-32.)

It would have been obvious to one of ordinary skill in the art at the time the invention was made to implement the synchronization method of Fischer in the system of Schroderus. One of ordinary skill in the art would have been motivated to do so in order to compensate for drift in direct mode communication as taught by Fischer (See column 28, lines 11-15.)

Response to Arguments

4. Applicant's arguments filed July 19, 2004 have been fully considered but they are not persuasive.

Rejection Under 35 USC § 103

On page 6 of the remarks, regarding claims 1, 3, and 7, the Applicant argues Kleider, Schroderous or Fischer, alone or in combination, fail to teach *the stored information is used to form a parameter history for each station and means for adjusting the receiver circuitry prior to reception of a signal from a transmitting station using parameter history of the transmitting station*. The Examiner respectfully disagrees. Schroderus teaches at step 207, storing information which includes the field strength and transmit power (storing parameter history for each station) (See Figure 2, column 5, lines 65-67 and column 6, lines 1-7.) Kleider teaches a communication unit having spectral adaptability with a receive unit 16 which comprises a signal memory 37, for storing the received signal (parameter history), and a spectrum analyzer/mode estimator (SAME) 34 (See column 5, lines 21-25.) The SAME 34 is used to dynamically adjust receive parameters, such as channel detection thresholds in a multi-channel receiver embodiment before the next signal is received (prior to reception), based upon the profile of the received

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signal spectrum (parameter history) (See column 5, lines 39-42.) Therefore, Schroderus and Kleider, when taken in combination, teach the claimed invention.

Conclusion

5. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

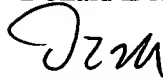
6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Donald L Mills whose telephone number is 571-272-3094. The examiner can normally be reached on 8:00 AM to 4:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hassan Kizou can be reached on 571-272-3088. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

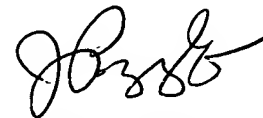
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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Donald L Mills



December 11, 2004



JOHN PEZZLO
PRIMARY EXAMINER